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ABSTRACT

A study investigated the relationship of different aspects of anxiety and second language production in a relatively non-threatening oral production task. Subjects were 43 introductory psychology students who had completed grade 12 French instruction at least 1 year prior to the study who had not had any formal French instruction since then. The subjects were told they would do a number of oral French tests but before beginning, completed a questionnaire indicating how anxious they felt at the time. In the first part of the task, the subjects were asked to name and record in French items belonging in certain categories. In the second part, they recorded their attempts at completing specific communicative tasks in French. After completion, subjects completed a battery of tests assessing various types of anxiety. After this, the subjects were told they would do more French tests, but again, were first administered the state anxiety measure. Subjects were then given an alternate form of the French test. Language test responses were scored for word production for categories and for grammatical accuracy in continuous speech. Results suggest that context-relevant anxiety, as distinct from general or situationally-aroused anxiety, plays a significant role in second language learning. A brief bibliography is appended. (MSE)

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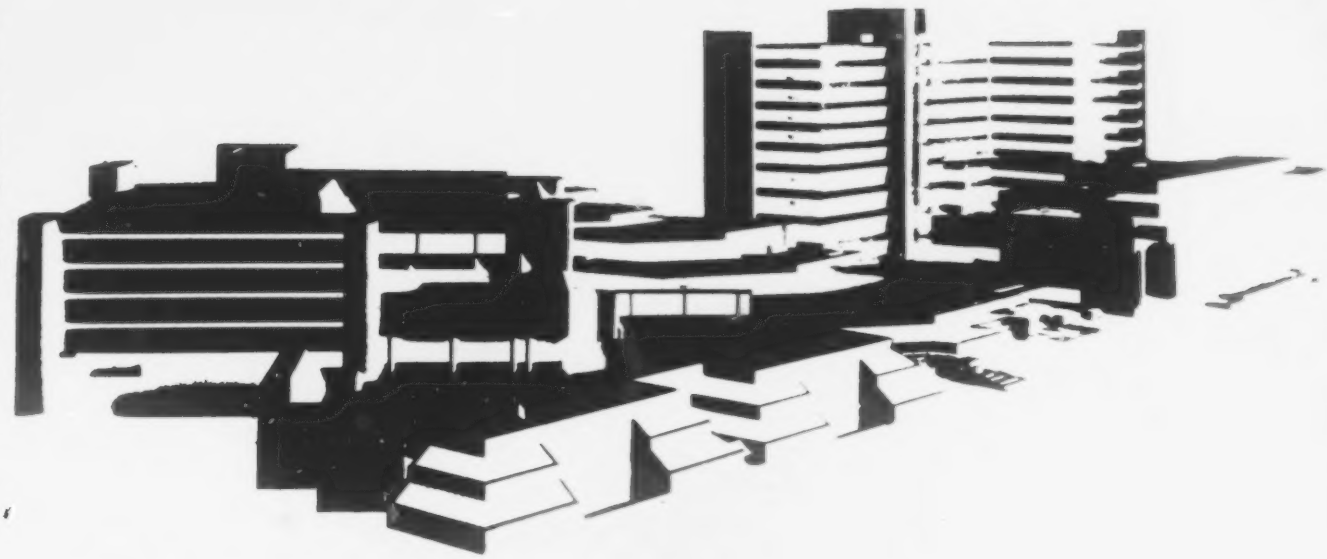

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The Role of Anxiety in Second Language Performance of Language Dropouts[1]

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Although it would seem to be an obvious variable involved in second language acquisition and use, the concept of anxiety and its role in this process is still not that clear. One reason for this is the apparent inconsistency in the relation of anxiety measures to proficiency in the second language, but this itself seems largely due to the use of very different measuring instruments. Thus, studies using generalized measures of anxiety or indices not directly implicated in second language study often obtain inconsistent results. Chastain (1975), for example, found a significant negative correlation between test anxiety and grades in an audiolingual French course, non-significant correlations with grades in regular French and German courses, and a significant positive correlation with grades in a Spanish class. A measure of manifest anxiety did not correlate significantly with grades in any of the classes. Gardner and Lambert (1959) and Tarampi, Lambert and Tucker (1968) similarly found no significant correlations between audience anxiety (stage fright) and indices of oral proficiency in a second language, while Lalonde (1982) found that general anxiety did not correlate significantly with proficiency even though French Class anxiety did.

Generally, much more consistent results have been reported using anxiety measures that directly involve the second language. Summarizing data based on many studies, thus involving sample sizes of over 1,000 in five different

grade levels, Gardner, Smythe, Clément, and Gliksman (1976) report significant negative correlations ranging from -.17 to -.43 between French Class anxiety and three indices of French achievement at each grade level. Similarly, significant negative correlations were also obtained between indices of French listening comprehension and French Class anxiety and French Use anxiety in university level students (Gliksman, 1981). Studies with French speaking individuals learning English also have found significant relationships between proficiency and situationally relevant anxiety measures. Correlation matrices aren't published in these studies, but factor analyses indicate definite associations. These are shown by negative relations between English Class anxiety, English Use anxiety and teacher ratings of English speaking skills, but not writing skills or English marks of grade 7 and 8 students (Clément, Major, Gardner & Smythe, 1977) and between both types of anxiety and final oral English grades for students in Grades 10 and 11 (Clément, Gardner & Smythe, 1977). Final written grades in English are also related at grade 10 but not at grade 11. In a later study, Clément, Gardner and Smythe (1980) found that aural comprehension and grammatical knowledge (but not reading comprehension) were negatively related to indices of English Class anxiety, English Use anxiety, Generalized Interpersonal anxiety, and English Test anxiety, but not French Class anxiety.

Although these latter studies were conducted in Canada, some research suggests that similar results would be obtained in other settings. Trylong (1987), for example, investigated students of French at a large midwestern state university and found significant overall negative correlations between French Class anxiety and performance on oral quizzes, written examinations and final course grades. Of the 36 correlations presented separately for nine

classes on four measures, all but three of them were negative (these three values were .00, .03 and .17) and 18 of them were significant ($p < .05$). The correlations ranged from -.60 to .17 with a median of -.35.

Reviews and theoretical discussions of the role of anxiety in second language acquisition and use have focused on different explanations of these types of results. Scovel (1978), for example, used a distinction drawn by Alpert and Haber (1960) between facilitating and debilitating anxiety to explain the inconsistency in some of the results obtained. They proposed that these were two independent types of anxiety, one that helped people perform better when they were nervous, and another that impeded performance. Some support for this type of analysis was provided by Kleinmann (1977). He found positive correlations between an index of facilitating anxiety and the use of the passive voice in English among a sample of Arabic ESL students, as well as with the use of infinitive complements and direct object pronouns in sentences with such complements among Spanish and Portuguese ESL students. He also found a negative correlation between debilitating anxiety and the use of direct object pronouns for this latter group. These types of data suggest that perhaps different types of anxiety operate differentially on the acquisition and use of language skills, thus supporting Scovel's proposition.

A different yet related type of explanation is offered by Gardner (1985). He suggests that it is possible that general anxiety is not an important variable in second language learning and use, but rather that specific situationally relevant anxiety is a factor. He proposed that situational anxieties such as language class anxiety, language use anxiety, language test anxiety, etc., would relate positively to generalized indices of anxiety because of the common anxiety component, but negatively to indices of proficiency in a second language because of the debilitating nature of anxiety

in influencing performance. Thus individuals who suffer from general forms of anxiety may do well or poorly in second language situations depending upon how they react to the situation and how they deal with their anxieties, but people who report that anxiety interferes with their language acquisition, use, and test performance, etc., will do poorly. Presumably it could be possible to develop language relevant indices of facilitating anxiety but the indices of French Class anxiety, etc., used in much of this research, with the exception of Kleinmann's, emphasize the debilitating nature.

A similar yet more inclusive conceptual foundation has been formulated by Horwitz, Horwitz and Cope (1986). They too emphasized the debilitating aspects of anxiety, but, after analyzing the language learning and language use context, they concluded that three types of anxiety, communication apprehension, test anxiety and fear of negative evaluation, were the most relevant. This formulation is particularly useful because it focuses less on the linguistic product associated with anxiety (as is the case with Gardner's analysis) but more on the nature of the fears that the individual faces in this context. They also propose a 33 item French Class Anxiety Scale which evidences high levels of internal consistency.

In the more general literature involving the concept of anxiety, a number of different conceptualizations have been suggested. One that is relevant to the preceding discussion treats anxiety as a form of arousal (see, for example, Hebb, 1955). The relationship between performance and arousal has been viewed as curvilinear wherein, at low levels, increases in arousal are associated with improved performance, but at higher levels, further increases in arousal are associated with decreases in performance. This type of conceptualization would explain positive, negative or null correlations between proficiency and anxiety, and in fact seems to be the interpretation

suggested by Chastain (1975). He stated, for example, "Perhaps some concern about a test is a plus while too much anxiety can produce negative results" (p. 160). This type of conceptualization, it will be noted, allows for a distinction between facilitating and debilitating anxiety, but rather than viewing them as independent as is the case in Alpert and Haber's (1960) formulation, it characterizes them as reflecting different ends of a continuum.

A different perspective is offered by Spielberger, Gorsuch, Lushene, Vagg and Jacobs (1983) who differentiate between two types of anxieties, trait and state anxiety. They consider trait anxiety as a stable individual difference in the tendency to perceive situations as threatening; in effect, it represents a proneness to become anxious. Presumably extreme trait anxiety is a form of anxiety disorder. State anxiety, on the other hand, is seen to be more situationally based, fluctuating around the baseline level of trait anxiety, with highly trait anxious persons showing more pronounced elevations of state anxiety. State anxiety, as the name suggests, is more transitory than the trait variety and is more highly dependent on the situation.

A still more specific and possibly universal type of anxiety can be thought of as topic or situational anxiety, a form of state anxiety that persists not necessarily across situations but within certain situations consistently across time. In this case, a "situation" would be defined by an individual's perception. For example, a pilot with a fear of heights may not perceive the aircraft as "high", but a 20 foot ladder may be overwhelming. Such situational anxiety has been investigated in many contexts in addition to that involving language learning and use. At a fairly general level, Endler

and Okada (1975) concentrated on a number of types of situation specific anxiety. The scale developed by these authors includes reference to four different situations that may give rise to anxiety: interpersonal, physical danger, novelty, and daily routine. Endler and Okada note that previous scales, including Spielberger's STAI, tend to concentrate on the interpersonal dimension when testing for anxiety while their measures are much more general. Another form of situational anxiety which is particularly applicable to students is test anxiety. Sarason and Ganzer (1962) developed a sixteen item Test Anxiety Scale as a measure of the "...subject's reaction to test situations" (p. 300) but feel that this instrument is sensitive to anxiety arising in any evaluational setting. Since eight items refer explicitly to examinations or intelligence tests, however, the scale seems most applicable to apprehension associated with written tests. A final index of anxiety that seems particularly germane to this experiment is audience anxiety. Paivio (1965) stated that a major feature of an audience is its evaluational role, and that audience anxiety (stage fright) is a reaction to it. According to Paivio, even an anticipated audience can have significant effects on memory as well as speaking style. He demonstrated that his measure of audience sensitivity was predictive of speech behaviour under various conditions of situation stressfulness, and thus it is reasonable to expect that audience sensitivity would relate to performance while speaking a second language.

As indicated by the preceding review, the concept of anxiety can be conceptualized in many different ways, and it is possible that different aspects of anxiety could be implicated in second language acquisition and performance for different reasons. The purpose of the present investigation was to consider the relation of different aspects of anxiety on the production of a second language in a relatively non-threatening oral production task.

Rather, however, than directing attention to students of a second language, this study instead considered students who had had considerable training in the language, but who for various reasons had opted to discontinue their language study. By considering this class of student it seemed possible to obtain a better estimate of the relation of specific anxieties to performance without the confounding effects of differential interest or motivation to learn the language.

Subjects

The subjects of this study were 43 students[2], enrolled in an introductory psychology course, who participated in this experiment in order to fulfill a course requirement. They had completed Grade 12 French at least one year previously and had not had any formal French instruction since then.

Method

Subjects were tested in a laboratory room in groups of four or less. When the study began, they were told that they would be asked to do a number of oral French tests, but first they were asked to complete a questionnaire indicating how anxious they felt at that time (i.e., a state anxiety measure). Twenty-three of the subjects then completed Form A of an oral French test, while the other 20 students completed an alternate Form B of the same test. Each of these tests consisted of two parts. In the first part, the experimenter asked subjects to name and record, in French, items belonging to categories. In presenting this part, the experimenter first gave an example and then wrote the categories on the board. No time limit was set, and subjects were instructed to shut off their tape recorders when they had finished. They were then told to put on earphones (so they could not hear

their colleagues) and complete the task. In the second part, they were instructed to record individually their attempts at completing communicative tasks in French. These were printed in individual booklets, one to a page, so that subjects could proceed at their own pace. Again no time limit was set, and subjects recorded their speech while wearing earphones.

Once subjects had completed this part of the oral test, they completed a battery of tests assessing various types of anxiety (see below). After this, they were told that they were going to do more French oral tests but first they were asked to complete the state anxiety questionnaire for the second time. Following this, they were given the alternate form of the French oral test.

When testing was completed the tapes were coded so that pretests and post tests could not be distinguished, and transcribed. Responses were then scored independently by two judges for two aspects of French oral proficiency, word production for categories, and grammatical accuracy in continuous speech.

Testing Materials

Eleven measures tapping various types of anxiety were administered using a variety of scales. In the following descriptions, Cronbach α reliability coefficients are presented following each measure.

1. State Anxiety (1). This scale was proposed by Spielberger et al. (1983) and consists of 20 items, requiring subjects to rate their present state of nervousness, insecurity, etc., on a scale from 1 (not at all) to 4 (very much so). Eleven items are written to imply feelings of anxiousness, while nine describe calmness. A sample item is "I feel nervous and restless". A high score indicates a high level of present anxiety. This measure was administered at the beginning of the study

immediately after subjects had been informed that they were going to be asked to record themselves speaking French, but before they had seen any actual materials. The Cronbach α reliability for this assessment was .92.

Scales 2 to 10 were administered to subjects between presentation of the two French speaking tasks. The measures were as follows:

2. Trait Anxiety. This scale (Spielberger et al., 1983) consists of 11 positive and 9 negative items referring to an individual's feelings of anxiety, worry and self-worth in his/her everyday life. Each statement is rated on a scale ranging from 1 (almost never) to 4 (almost always). A sample item is "I worry too much over something that really doesn't matter". A high score indicates a high level of general anxiety (α = .89).

3. French Class Anxiety. This is a seven point Likert scale consisting of four positive and four negative statements describing feelings of discomfort experienced during French classroom instruction (Gardner & Smythe, 1981). For this study, the items were worded to refer to French classes in the past, since students weren't currently taking French. A sample item is "Whenever I had to answer questions in French class, I would get nervous and confused". The maximum score for the total test was 56. As administered in this study, scores on this measure reflect the level of anxiety subjects felt when they last studied French (α = .82).

4. French Use Anxiety. This variable (see Gliksman, 1981) was also measured by means of a seven point Likert scale. It consists of four positive and four negative statements describing feelings of anxiety aroused by the prospect of using French to communicate in French with French speakers.

A sample item is "I would get nervous if I had to speak French to someone in a store". A maximum score was 56, with high scores reflecting anxiety at the prospect of speaking French in the general environment (α = .87).

5. Audience Sensitivity. This scale was adapted from Paivio (1965) and consists of five positive and five negative statements rated either True (2) or False (1), producing a maximum score of 20. The items refer to feelings of anxiety aroused in audience situations as expressed in the item "If I came late to a meeting, I would rather stand than take a front seat." The total score reflects the extent to which the subject wishes to avoid notice in social situations (α = .74).

6. Test Anxiety. This scale consists of ten positive items rated True or False describing feelings of unease experienced in connection with writing examinations (maximum score = 20). They were adapted from a scale developed by Sarason and Mandler (1952). A sample item is "Even when I am well prepared for a test, I feel very anxious about it", and the scale was scored such that high scores reflect the level of anxiety experienced in connection with writing examinations (α = .71).

There were four measures developed by Endler (see for example Endler and Okada (1975)) to assess anxiety reactions in four different situations as described in his S-R Inventory of General Trait Anxiousness. For each measure, subjects are presented with a situation (e.g., "You are in a new or strange situation"), and are asked to rate their typical reactions on nine items. Six reflect anxiety reactions such as "I perspire", or "I feel tense", while three describe more positive feelings (i.e., "I enjoy these situations"). Subjects rate their reactions on a scale from 1 (not at all) to 5 (very much). Maximum score for each scale is 45. The four measures are:

7. Interpersonal Anxiety. This measure involves anxiety reactions when "You are in situations involving interaction with other people" (α= .80)
8. Physical Danger Anxiety. This measure involves anxiety reactions when "You are in situations where you are about to or may encounter physical danger (α = .83).
9. Novelty Anxiety. This measure concerns anxiety reactions when "You are in a new or strange situation" (α= .80).
10. Daily Routine Anxiety. This scale refers to anxiety feelings that are experienced when "You are involved in your daily routines" (α= .61).
11. State Anxiety (2). Spielberger et al.'s (1983) state anxiety scale (see Variable 1) was readministered after subjects completed the above measures of anxiety, and after they were told that they were now to be given another French oral production task, similar to the previous one but involving different items. The reliability for this assessment was .94.

French oral proficiency for both the first and second administration of the oral tasks was measured by the following two variables:

12. Word Production. Subjects were asked to name as many items belonging to a category as they could (e.g., "Name all the animals you can think of"). The two categories were presented at each session, and the score represents the number of correct items named belonging to each category as determined by two raters independently.
13. Free Speech Quality. Oral proficiency in free speech was determined by presenting subjects with 11 tasks, and then evaluating their resulting verbalizations. A sample task was, "Explain why you like (or dislike) living in London." Subjects' responses were taperecorded and transcribed

and were assessed in random order by two raters. To determine Free Speech quality, each clause was rated for grammatical accuracy. A score of 3 was allotted to each correctly constructed clause, but one point (to a maximum of 3) was deducted for each major error. This measure is thus dependent upon the quality of the individual's oral grammar; however, it is more than that in that it also reflects the amount of speech produced. A subject's score was the sum of these ratings over the 11 tasks. Interrater reliabilities were computed for each of the two measures separately for both administrations. In order to remove any minor variation attributable to the nature of the tasks used in the two different forms, the data were first standardized within form. The resulting reliability coefficients for Administration 1 and 2 respectively were .97 and .95 for Word Production, and .87 and .95 for Free Speech Quality.

Results and Discussion

The main purpose of this investigation was to determine the relationship between the various indices of anxiety and the measures of French proficiency. Before considering these correlations, however, it was first necessary to examine some of the correlations among the anxiety measures as this helps to describe more fully the nature of the various indices of anxiety, as well as the dynamics of this particular testing situation.

An understanding of the testing context as perceived by the subjects was provided by considering the nature of the correlations among some of the anxiety measures. Spielberger et al. (1983, p. 15) propose, for example, that the trait and state scales should correlate around .65 under "neutral"

conditions; neutral being those situations which are neither overly stressful nor overly relaxed. The first administration of the state scale correlated highly ($r = .55$, $p < .001$) with the trait scores, as did the second administration ($r = .39$, $p < .01$). The slight decrease in correlation from the first testing to the second was not significant ($Z = 1.46$ using a test for the difference between correlated correlations suggested by Marascuilo & Levin, 1983), thus these results suggest that the experimental situation was perceived as relatively "neutral" by the participants.

A second set of correlations give some support to Endler and Okada's (1975) contention that anxiety reactions to the four situations in the S-R Inventory of General Trait Anxiousness are relatively independent. Certainly the physical danger measure is orthogonal to the other three (all $|r|$'s $< .2$, n.s.), but the interpersonal anxiety measure is related to anxiety reactions in novel situations ($r = .57$, $p < .001$), while both the novelty and routine scales are themselves correlated ($r = .45$, $p < .01$). Such results suggest that, in general, subjects were reacting to somewhat different settings in these measures.

A third set of relevant results involves the correlations between Endler and Okada's S-R Inventory of General Trait Anxiousness and Paivio's audience sensitivity measure. In this study, significant correlations were obtained between Paivio's measure and interpersonal anxiety ($r = .45$, $p < .01$), physical danger anxiety ($r = .35$, $p < .05$), and novelty anxiety ($r = .39$, $p < .01$). The daily routine situation, which arouses anxiety in "innocuous" situations did not correlate with Paivio's audience sensitivity ($r = .08$, n.s.). This pattern of correlations helps to support the contention that the audience sensitivity measure reflects primarily anxiety reactions to interpersonal and novel situations. This seems particularly relevant to the present study since testing was done in small groups meaning that a potential

audience was available, and initially at least the nature of the situation was unknown to the subjects.

The fourth set of correlations to be discussed here are those involving French class and French use anxiety. Previous research involving students in French language classes has demonstrated that these two scales correlate highly with each other (see for example Gliksman, 1981), and similar results are obtained in this study ($r = .60$, $p < .001$). Neither French Class nor French Use anxiety correlate significantly with Spielberger's trait anxiety or Endler and Okada's Daily Routine anxiety (r's $< .26$, n.s.), though they both correlate significantly with Paivio's audience sensitivity (r's $\geq .41$, p's $< .01$), Sarason's test anxiety (r's $\geq .39$, p's $< .01$), and Endler's interpersonal anxiety (r's $\geq .49$, p's $< .001$), and novelty anxiety (r's $\geq .52$, p's $< .001$), as well as the second administration of the state anxiety scale (r's $> .43$, p's $< .01$). French Class anxiety (but not French-Use anxiety) correlated significantly with the first administration of the State anxiety measure ($r = .40$, $p < .01$) while French Use anxiety (but not French Class anxiety) correlated with Physical Danger anxiety ($r = .35$, $p < .05$). The possible reason for the first Spielberger state anxiety test relating only to French class anxiety may have resulted because subjects didn't really know what to expect of the task when it was initially presented, and may have perceived it as potentially involving a classroom-type of task.

This interpretation receives some limited support from the correlations of some of the anxiety measures with the first and second assessments of state anxiety in that they generally tend to increase in magnitude at the second administration. This increase is significant for the measure of Audience Sensitivity ($Z = 2.47$, $p < .05$ using a test for correlated correlations suggested by Marascuilo and Levin, 1983), and marginally so for French Use

anxiety ($Z = 1.83$, $p < .10$), and Physical Danger anxiety ($Z = 1.82$, $p < .10$). These changes suggest that anxiety relevant to audience and French Use (and Physical Danger) contexts was activated during the testing situation, making the second administration of the oral tasks more highly related to situational anxiety associated with these types of anxiety. Such findings offer support to Horwitz et al.'s (1986) conceptualization that the major types of anxiety associated with second language use involve communication apprehension and fear of negative evaluation, but they do not support their contention with respect to test anxiety. The reason for this lack of association, however, could well be that the test anxiety scale refers primarily to written examinations, while the tasks in the present context were oral.

These results, therefore, provide evidence that the various measures of anxiety assess different but overlapping aspects of anxiety, and that the testing situation itself was not highly anxiety arousing. It is therefore informative to investigate how each of the anxiety measures relate to the quality of French produced in this situation.

Since it was necessary to have two versions of the measures of French proficiency, which were administered in counterbalanced order to two different sets of subjects, there was a possibility of a confound due to the measures themselves. In order to counteract this, the data for the anxiety and proficiency measures were first standardized within the two sets of subjects before the correlations were computed. Furthermore, although all the students had quit studying French at the end of Grade 12, there was some variability in the number of years they had studied French, reflecting the nature of the different language programs offered by their elementary and secondary schools. Their statement of the number of years studying French was also correlated with the various measures, and as might be expected there tended to be a

correlation between length of study and proficiency. The actual correlations were .45 ($p < .01$)(Word Production 1), .44 ($p < .01$)(Free Speech Quality 1), .17 (n.s.) (Word Production 2), and .39 ($p < .01$)(Free Speech Quality 2). The number of years studying French did not correlate significantly with any of the anxiety measures.

To ensure that the relations obtained in this study were not influenced by the length of French study, partial correlations were computed between each anxiety measure and each index of French skill. Table 1 presents these

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Insert Table 1 about here

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partial correlations. As can be seen, only nine of the 44 correlations were significant, but this reflects a very clear pattern. All of the significant correlations involve the Word Production measures and five of the 11 anxiety measures. None of the correlations between any of the anxiety measures and Free Speech Proficiency were significant, suggesting that anxiety is not a factor in situations where individuals are able to draw on all their resources to attempt to communicate. On the other hand, four anxiety measures, French Class anxiety, French Use anxiety, Audience anxiety, and Novelty anxiety correlate significantly negatively with the word production measure on both the first and second testing, while Interpersonal anxiety correlates negatively with Word Production on the first testing. These correlations suggest therefore that heightened levels of anxiety in French Class, French Use, Audience, Novelty and, initially, Interpersonal contexts were associated with lower levels of performance.

This pattern of relationships is particularly informative given the nature of the word production task. This task involved directing all

students' attention to the blackboard, thus emphasizing the presence of the other students, and invoking elements of French Class, Interpersonal and Audience anxiety. The task also is somewhat unusual in that one is seldom called upon to say all the words that one knows that fit a given category. As such, it would be expected to be influenced by feelings of anxiety associated with novel contexts. Finally, of course, the task obviously involves the use of French, hence the involvement of French Use anxiety.

It seems particularly significant that it is these anxiety measures, and not the other anxiety indices, that correlate with French proficiency. That is, it is not anxiety, per se that appears to influence French proficiency but rather anxiety that is relevant to the task itself. Generalized trait anxiety did not relate significantly to proficiency, indicating that it is not simply anxious individuals who do poorly. Nor did the two indices of State anxiety correlate significantly, suggesting that differences in anxiety (arousal) in the immediate context are not related to proficiency. Nor do measures of Test anxiety, Physical Danger anxiety, or Daily Routine anxiety relate to proficiency. Such anxiety measures would not be expected to be related to proficiency because, with the possible exception of Test anxiety, they really are not appropriate to this context. (Even Test anxiety, as measured, isn't really appropriate since it refers to written formal examinations rather than laboratory-based oral tasks.)

A major finding in this study is that those anxiety measures that would be expected to relate to French proficiency in this context (i.e., French Class, French Use, Audience, Interpersonal, and Novelty) related only to the French Word Production measure and not the Free Speech proficiency index. This, perhaps surprising, finding is however perfectly reasonable given the nature of the two tasks. In the Word Production task, subjects are very

limited in what they can produce. Only words that were appropriate to the category were acceptable, and subjects had to focus on all possible elements in these categories. Those individuals who felt that anxiety would interfere with their performance in French Class, French Use, Audience, Interpersonal, and Novel contexts had more difficulty and produced fewer relevant words. In the Free Speech situation, on the other hand, individuals had more options at their disposal. They could try different ways of saying the same thing, they could repeat themselves, albeit with some variation, and they could bring in tangential material, etc. That is, they could make use of many different strategies in completing the task, thus reducing the effects of anxiety.

One clear generalization suggested by these findings is that anxiety is not a major correlate of proficiency in the use of a second language unless that anxiety reflects fears about using the language, is evoked in the language learning context, concerns interpersonal relations, or is generally specific to some aspect of the task. Another clear generalization is that such anxiety has an influence largely when the options open to the language user are limited. There is little in the results to suggest that a general trait of anxiety, test anxiety, or feelings of anxiety aroused when faced with the task of speaking French relates to proficiency in using the second language. Furthermore, relatively irrelevant forms of anxiety also do not influence performance. To a considerable extent, these results support earlier arguments (Gardner, 1985) that generalized anxiety does not play an important role in second language acquisition, whereas anxiety that directly involves French as a target plays an important role. Similar generalizations as applied to the language learning context were made by Lalonde (1982) who found that a general trait of anxiety did not correlate significantly with

various indices of French proficiency whereas measures of French class anxiety did correlate significantly.

Gardner (1985) had argued that measures like French class anxiety and French use anxiety were [illegible] French proficiency in the language classroom because they were situation specific. That is, it was anxiety aroused in the situation where French was used that was important, not one's general level of anxiety. To some extent that generalization is supported by the majority of the results obtained in this study because those measures of anxiety that were related to proficiency were clearly situationally relevant. However, the results of this study also do not support the generalization in that the measures of anxiety referring to the specific time when these students were faced with having to speak French (i.e., the State anxiety measures) are not related to their proficiency. Thus one aspect of the situationally specific interpretation (i.e., learning or using French, or engaging in audience, interpersonal or novel situations) is supported, but the other (i.e., the anxiety aroused in that specific context) is not. These results suggest that it is people's concerns about their French proficiency or their interactions with others that influences how well they perform. Although many individuals may feel anxious in the particular situation, some can muster their resources to deal with the task at hand so that the situationally localized anxiety does not affect their actual behaviour. That is, it is not so much the anxiety that results in the impaired performance, but rather impaired performance occurs for those individuals who expect impaired performance to result from their anxiety. To the extent that their options are restricted, they simply fulfill their expectations. Those individuals who have felt anxious when trying to use French, or when learning it, or who feel anxious in interpersonal audience situations or novel

situations and who anticipate poor performance as a result are those who demonstrate somewhat impaired performance.

One possibility mentioned in the introduction but not considered in these analyses is that the relation between second language performance and anxiety forms an inverted U function. That is, relatively poor proficiency would be associated with both low and high levels of anxiety, while high levels of proficiency would be associated with intervening levels of anxiety. This form of curvilinear relationship was investigated using multiple regression procedures (Cohen, 1978) where the Word Production and the Free Speech Quality scores at each testing session were each regressed on each anxiety measure. There was no indication in any of these 44 analyses that the relationship took this form, and in fact the two analyses that were significant evidenced weak indications (R^2 = .12 and .24) of U functions. As a consequence the interpretations offered earlier of the relationships between proficiency and the different forms of situational anxiety seem to be the most appropriate at this time.

This study was concerned with the relation between various indices of anxiety and skill in speaking French by individuals who were no longer studying French. It was not concerned with the role of anxiety in learning French. Nonetheless, since it indicated the very real role that context relevant anxiety, as distinct from general or situationally aroused anxiety, plays in second language behaviour, the findings are applicable to the second language learning context. It would seem that fears students develop about the interpersonal use of that language can possibly act to inhibit their performance, as proposed by Horwitz et al. (1986). Although they might be able to deal with their anxiety in the immediate situation and cope with the task at hand, the general expectations they have relevant to the context of

actually using the language can operate to interfere with their production, providing there are few opportunities for them to use strategies that would compensate for the anxiety.

Footnotes

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2. Originally, 50 students were tested; however, seven had to be discarded for various reasons. Four students were native French speaking individuals, and three other students had mechanical problems with their tape recorders.

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Table 1

Tables of Partial Correlations of Eleven Anxiety Measures with Four Indices of French Proficiency (Years Studying French Removed)

	French Proficiency Measures			
	First Testing		Second Testing	
Anxiety Measures	Word Production	Free Speech Quality	Word Production	Free Speech Quality
State 1	-.01	-.22	-.10	-.14
Trait	-.12	-.16	-.08	-.14
French Class	-.48***	-.22	-.52***	-.27
French Use	-.41**	-.08	-.39*	-.13
Audience	-.53***	-.15	-.40**	-.17
Test	-.29	-.17	-.30	-.18
Interpersonal	-.38*	-.20	-.28	-.08
Physical Danger	-.16	.14	-.22	.08
Novelty	-.42**	-.22	-.44**	-.28
Daily Routine	-.18	-.22	-.17	-.14
State 2	-.16	-.21	-.23	-.07

* $p < .05$

** $p < .01$

*** $p < .001$